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**OBJECTIVE:** The aim of the study was to evaluate decision-making process and probabilistic bias in patients with obsessive-compulsive disorder (OCD). **METHODS:** Our sample consisted of 80 subjects (40 diagnosed with OCD and 40 healthy controls). To assess the clinical characteristic of the sample we performed a clinical interview and a psychometric assessment using the Barrat Impulsiveness Scale (BIS-11) and the Cloninger's Temperament and Character Inventory (TCI-125). To assess decision making processes and probabilistic reasoning we used the Iowa Gambling Task (IGT) and the Beads Task. **RESULTS:** OCD group had a significantly lower IGT final netscore ( $p = 0.032$ ). Moreover, controls showed a significant improvement between netscore 1 and netscore 5 ( $p = 0.014$ ) while patients did not ( $p = 0.700$ ). Patients also showed significantly less draws till decision on the Beads Task ( $p = 0.000$ ). We performed four regression analysis to evaluate the influence of clinical variables (duration of illness, treatment resistance, Y-BOCS Score, presence of tics, Barratt Score) and personality traits (TCI sub-scales) on IGT netscore and Beads Task. The results indicated that the four overall models were not statistically significant. **CONCLUSIONS:** Our data show the presence of a decision making and probabilistic reasoning impairment in OCD. These data could be interpreted in a neurocognitive perspective as executive dysfunction and in a neuroeconomic perspective as a reduced loss avoidance and overconfidence during decision making processes.